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| 10/084,829      | 02/28/2002  | Don Elrod            | LYNN/0151           | 3470             |

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| ART UNIT | PAPER NUMBER |
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1751

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Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 10/084,829  
Filing Date: February 28, 2002  
Appellant(s): ELROD, DON

\_\_\_\_\_  
Frank J. Campigotti  
For Appellant

EXAMINER'S ANSWER

**MAILED**  
AUG 25 2005  
**GROUP 1700**

This is in response to the appeal brief filed Jun 29, 2005.

(1) ***Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Claimed Subject Matter***

The summary of the claimed subject matter contained in the brief is correct.

**(6) *Grounds of Rejection to be Reviewed on Appeal***

The appellant's statement of the grounds of rejection to be reviewed on appeal in the brief is correct.

***WITHDRAWN REJECTIONS***

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner: Claims 34-53 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

**(7) *Claims Appendix***

The copy of the appealed claims contained in the Appendix to the brief is correct. The copy included all claims in the application including those that are withdrawn.

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**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

|              |                   |               |
|--------------|-------------------|---------------|
| US 4,810,567 | Calcaterra et al. | March 7, 1989 |
|--------------|-------------------|---------------|

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 17-19, 21-26, 28-30, 34-53 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Calcaterra et al., US 4,810,567.

Calcaterra discloses fabrics having the same properties as the claimed fabrics. Said fabrics are formed by grafting a polymerizable monomer onto a fabric surface after forming peroxide groups and decomposing the peroxide groups with an iron catalyst. In column 7 lines 48 et seq, the process as claimed is disclosed, wherein a ferrous ion-hydrogen peroxide redox system is used to form the oxygen radicals used to graft the monomers onto the fabric of fibers. The process is taught as being equivalent to several other redox systems for initiating graft polymerization. The process is summarized in col 8 line 54 et seq. The fabric formed is tested for its antimicrobial properties, and provides protection from E. coli and S. aureus as claimed. See col 11 lines 18-37. Accordingly the products formed by the method of Calcaterra et al. anticipate the product formed by applicant's claimed process. Regarding the limitation

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of claims 25 and 26, in column 1 the introduction explains that an improved fabric for surgical draping and other items used in hospital settings is needed. Regarding the limitations of claims 28-30, the product of the reference is not taught to have substantial disruption of interfiber adhesion and is not taught to have a substantial loss of fabric strength, tensile strength, tear resistance or abrasion resistance.

Applicant has added a phrase to claim 23 wherein the grafted fabric comprises a disinfectant that is a polymerizable monomer or a derivative of a polymerizable monomer. In column 8 patentee describes methods of chain termination. One method is by the addition of oxygen to form a peroxy radical which then abstracts a hydrogen, in which case the end group T is the hydroperoxy group, OOH. Whenever this method of termination occurs, the limitation of the claims are met since the hydroperoxy group is a disinfectant. See col 8 lines 24 et seq.

Regarding the limitations of claims 34 and its dependent claims, this section in column 8 of Calceterra discloses that that fabric comprises a vinylic monomer (inclusive of the acrylic acid monomer as claimed) terminated by a hydroperoxy group. Accordingly Calceterra's disclosed fabric comprising a hydroperoxy group vinyl monomer has the claimed properties absent evidence to the contrary.

The subject matter would have been obvious to the skilled artisan because the patentability of a product by process claim does not depend on its method of production and where the examiner has found a similar product, the burden rests with the applicant to prove that that product is patentably distinct. See *In re Thorpe*, 227 USPQ 964 (CAFC 1985); *In re Marosi et al*, 218 USPQ 289; *In re Pilkington*, 162 USPQ 145.

"The lack of physical description in a product-by-process claim makes the determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not the process that must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 173 USPQ 685,688 (CCPA 1972).

**(10) Response to Arguments**

Appellant argues that the claims are not anticipated because applicant's fabric has a monomer grafted onto it while Calceterra has a copolymer grafted onto it. A copolymer is necessarily made up of monomers. The fabric of Calceterra is formed by grafting a monomer onto it. See for example col 6 lines 60-62 which states, "There is then made a graft copolymer of the underlying fabric thereof and a vinyl **monomer** having a first functional group." See also Col 9 line 8 which states, "The reaction is one between a first functional group of the graft copolymer originating either directly or indirectly from the **vinyl monomer...**"

On page 8 appellant argues that Calceterra does not disclose a fabric having sufficient peracid to detoxify pesticides as claimed in claims 21 and 38. Appellant has never shown how much peracid is sufficient, which pesticides are detoxified, and to

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what extent. Accordingly there is no evidence that Calcaterra's fabric will not detoxify pesticides.

Appellant further argues that Calceterra does not teach grafting a monomer to the oxygen radicals on the fabric's surface, where the disinfectant is a polymerizable monomer or derivative thereof. Calceterra discloses grafting a vinyl monomer to the fabric surface. Furthermore he discloses that that monomer may be terminated with the hydroperoxy group (OOH). Accordingly, the product is a fabric having a vinyl monomer comprising a hydroperoxy group, said hydroperoxy group being a disinfectant. IT is the same disinfectant that applicant uses. The method of grafting is not considered since this is a product y process claim.

Appellant further argues that Calceterra does not teach that the -OOH provides antimicrobial effectiveness to the fabric and accordingly the fabrics are not similar, that is, not obvious variants under 103. In response to this argument this office notes that the OOH (peroxide) species is known to provide antimicrobial protection. One cannot separate a compound or chemical species from its properties.

Appellant next states that the chain terminator of Calceterra. does not provide a beneficial amount of activity on the fabric. No proof or evidence of any kind is given. How does appellant judge beneficial activity? Appellant states that Calceterra is silent on the subject that the fabric has sufficient percarboxylic acid to detoxify pesticides and biological weapons. This office replies that since the product of Calceterra comprises a vinyl monomer with hydroperoxy groups, which appellant agrees is a known disinfectant

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species, Calceterra need not list the beneficial properties. Appellant has provided no evidence that Calceterra's fabric fails to provide beneficial activity, nor does appellant state the amount of grafted OOH groups needed for protection. Calceterra's product is taught to provide an antimicrobial fabric.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Margaret Einsmann



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